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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/019,240

05/13/2002

Jorg Peter Schur

von Kreisle.018

1893

110 7590 02/05/2008  
DANN, DORFMAN, HERRELL & SKILLMAN  
1601 MARKET STREET  
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PHILADELPHIA, PA 19103-2307

EXAMINER

WINSTON, RANDALL O

ART UNIT

PAPER NUMBER

1655

MAIL DATE

DELIVERY MODE

02/05/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/019,240

Applicant(s)

SCHUR, JORG PETER

Examiner

Randall Winston

Art Unit

1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-13, 15-19 and 22-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13, 15-19 and 22-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Acknowledgement is made of receipt and entry of the amendment filed on 11/18/2007.

This action is made non-final due to a new ground of rejection.

Claims 1-6, 8-13, 15-19 and 22-31 will be examined on the merits.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, 8-13, 15-19 and 22-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rendered vague and indefinite because of the phrase "one of more flavoring agents selected from tannins; and lactic acid. Does applicant mean tannins and lactic acid are included within the composition together? or Does the composition include one active ingredient and not the other? Clarification is required.

Claim 2 is rendered vague and indefinite because of the phrase "from 0.01 to 25% of and optionally". It is unclear to examiner because the composition is from 0.01 to 25% of what? Clarification is required.

Claim 6 is rendered vague and indefinite because of the phrase "further comprises lactic acid." It appears to examiner that this claim does not further limit claim 1. Correction is required.

Claim 8 is rendered vague and indefinite because of the phrase "from 0 to 99.8% by weight of propylene glycol." It appears to examiner that this phrase is outside of the limitations of claim 1. Correction is required.

Claim 10 is rendered vague and indefinite because the phrase "composition comprises additional GRAS." Should the above phrase include further comprising? Correction is required.

Claim 24 is rendered vague and indefinite because of the commas after by weight. The comma should not be after by weight. Correction is required.

Claims 25 and 27 are rendered vague and indefinite because each claimed species such as *Bacillus subtilis* or *Pseudomona fluorescens* or *Bacillus anthracis* should be capitalized within the claim. Correction is required.

Claim 31 is rendered vague and indefinite because the phrase "composition further comprises at least one." Should the phrase include a Markush group? (For example. Should the phrase read "composition further comprises an extract selected from the group consisting of at least one"?) Correction is required.

All other claims depend directly or indirectly from the rejected claims and are, therefore, also rejected under 35 U.S.C. 112, second paragraph for the reasons set forth.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-13, 15-19, 22-31 stand rejected under 35 U.S.C. 103 as being unpatentable over Schroeder et al. (US 5,591,395) in view of Andrews (US 5569461), Scalbert et al ("Antimicrobial Properties of Tannins, Phytochemistry Vol. 30, No. 12, pp. 3875-3883, 1991), Varga, J. (Derwent ACC-NO 1976-72203X, see abstract), Hopp et al. (US 4110430), Isaacs (US 6033705), Beerse et al. (US 6284259) and Crawford (US 6,086,904) for the reasons set forth in the previous Office action which are restated below.

Applicant's claims a method for disinfection of air to reduce the concentration of germs comprising the distributing or atomizing of an antimicrobial composition wherein the antimicrobial composition is free from ethanol and isopropanol and wherein the antimicrobial composition comprises propylene glycol, tannins, lactic acid, benzyl alcohol and further comprises hydrocinnamic alcohol, additional GRAS flavoring agents such as essential oils (see, e.g. claims 10 and 31) and an emulsifier (see, e.g. claim 17).

Schroeder et al. teach a method of disinfecting the air to reduce germs (i.e. bacteria) contained within the air comprising distributing an antimicrobial composition comprising of propylene glycols in the air. Schroeder does not teach the other claimed

active ingredient such as tannins, lactic acid, a benzyl alcohol, a hydrocinnamic alcohol, additional GRAS flavoring agents such as essential oils and an emulsifier contained within its antimicrobial composition to reduce germs such as microbials within the air.

Andrews teaches an antimicrobial composition comprising propylene glycol and lactic acid having antimicrobial activity. (see, e.g. entire patent including claims and abstract).

Scalbert et al. beneficially teach (see, e.g., entire article.) tannins to have antimicrobial properties.

Varga J beneficially teach (see, e.g. abstract) a benzyl alcohol to have antimicrobial and/or antibacterial properties.

Hopp et al. beneficially teach (see, e.g., column 1, lines 21-29 and lines 60-65) a hydrocinnamic alcohol to have antimicrobial and/or antibacterial properties.

Issacs beneficially teach (see, e.g., column 10, lines 23-29) an emulsifier may be added to a compound to enhance its antimicrobial effect.

Beerse et al. beneficially teach (see, e.g. column 9, lines 19-39) essential oils (i.e. orange etc) to have antimicrobial and/or antibacterial properties.

Crawford beneficially teaches that a composition comprising essential oils (i.e. orange) distributed within the air to disinfect the air (see, e.g. entire patent including abstract and claims).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schroeder's antimicrobial composition comprising antimicrobial agents to be distributed with the air disinfect the air to include the other

claimed active ingredients having antimicrobial activity as beneficially taught by Andrew, Scalbert, Varga J, Hopp, Isaacs, Beerse and Crawford because the combined above references would create the claimed antimicrobial composition whereas when the claimed composition comprising of well known active ingredients having antimicrobial activity would intrinsically reduce when distributed within the air the concentration of microbial and/or bacteria germs within the air. Furthermore, the adjustment of other conventional working conditions (e.g. the claimed concentrations of the antimicrobial composition within the air, the type of antimicrobial system and/or spray design and the substitution of known bacteria for one another to be treated and/or reduced), is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Accordingly, the claimed invention was prima facie obvious to one of ordinary skill in the art at the time the invention was made, especially in the absence of evidence to the contrary.

Applicant's arguments are deemed moot in view of the full combination of references relied upon in the above 35 USC 103(a) rejection.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Winston whose telephone number is 571-272-0972. The examiner can normally be reached on 8AM-5PM.

Application/Control Number:  
10/019,240  
Art Unit: 1655

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



CHRISTOPHER R. TATE  
PRIMARY EXAMINER